2012-13 CLASSIC OUTBOARD RUNABOUT 1/30/12

The following COR rules have been approved by the Special Events Chairman and the Special Events Committee and are effective immediately. Barring extenuating circumstances, these rules shall be considered "frozen" for the racing years 2012 and 2013. New rule changes may be submitted at the National Meeting in 2013 and, if approved, shall become effective Nov. 1, 2013 for the 2014 racing season. To suggest changes or ask about the COR class, please contact COR Chairman Rodney Zapf at 310-376-6392 or c) 310-488-3563 or rodneyzapf@gmail.com .

OBJECTIVE:

The Classic Outboard Runabout class is designed for the racer who would like to purchase a race boat at a relatively low cost that could double as a family boat when not racing, and who does not want to compete in the "fast" classes of today. The 2.0 class has gained popularity in recent years due to the Enduro races run at the Parker 300. The Classic Outboard 2.0 class may be described as a throwback to the very popular "Utility" class of racing in the 1950s. The rules for this class are aimed at safety, yet will provide a speed that racers, both young and old, will appreciate. During past races and after thorough testing, we have found that the Classic Outboard 2.0 Class, running under the following rules, can and will achieve speeds on a long course in the 80s. In the current rules below we have added weight and length to ensure that the boats will run in the low 80s, which will be a continuing "target" speed for this class. The 2.0 Mercury V-6 is the primary engine for this class; however, as you will see, provisions have been made for the Mercury inline 6 and V-4 OMC engines to compete also. Cost projections for these motors to be "built" are near $2500. COR events are promoted and discussed on the website www.corboatracing.com . The enthusiasm this class generates can be seen in the safety, targeted speed ranges, and relative inexpensiveness as racing goes.

The COR classes compete under the Special Events Committee of APBA and will be managed as such by the **Special Events Chairman** with the assistance of the COR Class Chairman.

Rule 1: General rules governing all Classic Outboard Runabouts

A. Racing numbers shall be not less than 10 inches high. The numbers shall be visible on both sides of the boat and shall be dark on a plain light background or vice versa.

B. A 3 inch high (minimum), COR-2.0 (Classic Outboard Runabout 2.0) or COR-100 shall be placed on the same plain background as the number appears.

C. The requirements for a Pro Series event shall be determined by the **Special Events** Chairman and shall consist of a minimum of 5 races within a calendar year with a minimum purse of $1000.00 per race to be paid to the top four (4) contestants based on total points won at the Pro Series events during that year. These monies shall be collected and held by the **Special Events** Chairman to be disbursed at the end of the COR Pro Series.

D. Any temporary rule deviation must be requested in writing by the COR Chairman, regatta promoter, or race Chairman for the success of a particular event, and can be approved by the **Special Events** Chairman only.

Rule 2: Safety Rules (*COR classes must comply with all APBA General Safety Rules unless more restrictive rules are provided below*)

A. All fuel lines must be Coast Guard approved for gasoline engines, secured in a workmanlike manner.

B. Engines run "out of the water" must be in neutral and remain in neutral while the engine is "turning over".

C. All boats must be equipped with a positive throttle return to the closed position when throttle pressure is released or with throttle cable detached. In addition, the boat must be equipped with a

positive safety switch that will break the ignition circuit in the event a driver is thrown from the boat. The switch must be properly attached to the driver prior to starting the engine and must not exceed approximately 10 lbs. of pull to activate.

D. Steering may be actuated by the cable/pulley, double push/pull or hydraulic method.

E. The propeller shaft must be placed no higher than 1 inch below the planing surface of the boat with the propeller shaft parallel to that planing surface.

F. A fully charged, minimum 2-1/2 pound CO_2 or dry chemical fire extinguisher must be in the pit area at all times.

G. A 15' or longer line capable of towing the boat must be secured to the bow eye. Also, a paddle must be securely stowed in the cockpit of the boat.

H. There shall be no loose gear allowed in the cockpit at any time during competition.

I. Minimum age for competing in the COR 2.0 Class shall be 18 years of age. Drivers of the V-4/inline 6 cylinder (COR-100) boats must be a minimum of 16 years of age. Drivers shall be required to wear eye protection of plastic or heat-treated lenses, with no metal frames being allowed.

J. All crew members shall be required to wear closed footwear. All contestants are requested to wear uniforms with tight fitting cuffs at the ankles and wrists.

K. Only stock flywheels manufactured by the OEM shall be allowed in the COR classes. These flywheels may not be modified in any way.

Rule 3: Inspections

A. Safety inspection of the following (considered minimal)

1. Seat fastening
2. Steering system
3. Fuel tank mounting
4. Throttle returns/engine "kill" switches
5. Turnbuckles etc. for safety wire
6. Life jacket and helmet in compliance with APBA General Safety Rules
7. Obstructions that would prove detrimental to the safe operation of the boat.
8. Securely fastened bow eye and satisfactory tow rope.
9. Engine and boat inspection may consist of any checks of the following COR-2.0 / COR-100 rules. No further teardown is required unless a written protest accompanied by a one hundred dollar protest fee is presented to the referee within 30 minutes after the last contestant finishes the race. (See APBA rules concerning officials, protests and appeals)

Rule 4: Classic Outboard-2.0 Technical Rules

ENGINES: (General):

V-6, Inline 6 (T-2) and V-4 (Looper and Strangler) engines manufactured and made available to the general public with an original displacement of 125 cu. in. or less. Engines built and designed by the manufacturer strictly for racing shall be prohibited. The engines must be naturally aspirated and run on gasoline containing no oxygen-carrying additives introduced to the combustion chamber in any way. The maximum displacement for any engine shall be **130 cu. in.** to provide for cylinder "clean-up"**.** Unless specifically forbidden in the following, engines may be modified in any way. All engines must adhere to the midsection, lower unit measurements and weight as specified in the COR 2.0 rules.

MERCURY V-6 2.0 MANUFACTURED POWERHEADS:

1. V-6 Mercury engines must be of a standard production design. Special purpose engines shall not be allowed. Ports may be modified, raised, or enlarged, but shall remain in their original positions. Additional ports may not be added to the cylinders. "Behind the Liner" engines shall be prohibited, as shall finger porting, and Bridgeport exhausts. The cylinder head volume shall not be less than 26cc's, measured using a surface gap plug. Combustion chamber quench area shall have a minimum of 0.100" band at the perimeter that is on the same plain as the deck surface. There shall be no fly-cutting of the heads allowed. Pistons must be of a flat top design with no dome or modifications made to increase compression. The engine may have no more than 6 carburetor venturis, measuring no more than 1.327 at the venturi. EFI engines shall not be allowed. All critical or performance related parts/components (except pistons, rings, bearings, reeds, replacement electronics and sealing components) shall be made by the OEM. Parts may be exchanged from other years or HP models. No other aftermarket parts or mixing of parts from other manufacturers shall be allowed.

2. **MERCURY INLINE 6 AND OMC V-4 MANUFACTURED POWERHEADS:**

   These engines must be carbureted. Powerheads must exhaust no higher than the midsection and must comply with the general rules governing Classic Outboard Runabout (COR) Engines.

   a. OMC engines must be equipped with production based intake components: e.g. front half, intake manifold, maximum of 4 plastic single barrel carburetors.

   b. Mercury inline 6 engines must be equipped with production based intake components: e.g. front half, intake manifold and a maximum of 3 carburetors with a maximum throat of no more than 1.327 " measured at the venturi.

MIDSECTIONS:

All powerheads must be mounted on an exhaust adapter plate sold by the OEM. Modifications are allowed. Midsections must be a minimum of 15 inches and made by the OEM. The swivel bracket attaching the engine assembly to the boat must be made by the OEM for an engine with same configuration as the powerhead used. Modifications are allowed. All COR engines must exhaust no higher than the midsection. Power trim systems may use any type of component.

LOWER UNITS:

Lower units must be produced by the OEM for the powerhead in use. (Exception: 2.0 V6 Mercury engines must use the larger lower unit housing measuring 4.7 inches at the aft-most point just ahead of the prop. OMC and Mercury inline sixes may use any shiftable gear case. Lower units must have a functioning forward, neutral and reverse operable from the driver's seat and must be a thru hub exhaust. Water pickups may be modified or relocated, but must be located on the lower unit. Pointy noses may be added to L/U. Prop shaft center line shall be no higher than 1 inch below the bottom most portion of the aft planing surface of the boat. Engine jack plates with power adjustment must be disconnected in a location not accessible from the driver's seat **and must be inspected and "sealed" prior to the race.** The measurement for the height of the prop shaft shall be measured with a straight edge placed on the bottom, 36 inches forward of the transom and parallel to that flat portion of the boat. Any rocker in the bottom of the boat aft of this point shall be disregarded in the measurement as the straight edge runs on out to the prop shaft for measuring purposes. A boat with a built-in "hook" shall be measured in the same manner; however, the straightedge will be placed in the area 36 inches forward of the transom and will again contact the bottom in the aft area of the "hook" running on out to the prop shaft. Prop height from a boat with a concave pad shall be measured from the lowest part of that pad.

HULL:

V, Flatbottom or Modified V-Bottoms are allowed in this class. General Rules are as follows: All boats must have an "open" cockpit and may not be "cowled-in". **An open cockpit shall consist of an undecked area that is at least 36" wide and 48" long.**

WEIGHT:

Boats complete with engine and accessory equipment such as fuel tank, steering, seat etc. shall weigh a minimum of 1550 lbs. including the driver, safety equipment and remaining fuel. Ballast may be added to boats so long as it is securely anchored in the boat in a manner so as to prevent it from detaching in event of an accident. No single piece of ballast shall weigh more than 50 lbs. Boats adding more than 40 lbs. shall be required to attach the ballast a minimum of 3 feet forward of the inside of the transom. (Any combination of batteries in excess of 120 lbs shall be considered ballast.) **Water shall not be used in any way as a form of ballast. All boats shall be weighed "dry" at least once a year by an APBA official. The boat's weight shall be documented, and a form attesting to the actual weight of the boat on that date must be signed by the official APBA inspector. The form shall include a list of equipment on the boat and include all ballast. To the documented boat weight, the weight of the driver at any given race shall be added. The driver shall be weighed with all required racing equipment. Additional weight checks on any boat/driver combination may be required at any time by the APBA referee at any race. A request for a weight check directed to the referee, signed by all of the "other" driver/owners, shall constitute a valid reason for the referee to perform a weight check on the boat and driver in question. If there are no local scales capable of weighing the boat in question, the documented weight may be used. The driver's weight as determined by a bathroom-type scale, added to the documented weight of the boat, shall equal or better the minimum weight of 1,550 lbs. All boats are required to have safe lifting straps at every race so this rule can be implemented at the discretion of the race referee.**

LENGTH:

Minimum boat length shall be 18' 6" measured from the bow to and including the transom. Non-structural protrusions may not be added to boats to comply with the minimum length **rule such as set-backs / jackplates / false additions to bow and/or sponson. The intersection of the driver's seat and seat back shall be within 48" of midship.**

SPECIFIC RULES referring to V-Bottom, Flatbottom, Modified V-Bottom:

1. V-Bottom or Flatbottom boats are permissible in this class with the following restrictions: On either, the rectangular area of the bottom extending from the aft end to a transverse line four feet forward of the aft end of the boat bottom (transom) and bounded by for and aft lines one foot to either side of the boat centerline is subject to the following limitations:

    a. No part of this area shall be above any part of the boat bottom outside this rectangle, with exception of longitudinal grooves of depth no greater than 1 1/2 in. formed by strakes or lengthwise steps. Any lengthwise protrusions that can be construed as air traps shall be prohibited. The Turn Fin must be mounted within 2 feet of the centerline of the boat and may be no longer than 20 inches.

    b. No part of this area may contain breaks in the longitudinal continuity of the planing surface that would provide steps such as on a hydroplane.

2) Modified V-Bottoms are permissible in this class subject to the following rules:

    a. These boats must have a center pod extending below or at least even with the outside sponsons. Starting at the transom, the pod must be a minimum of 8" wide with a cross section width taken from the plane between the tips of each sponson carrying forward for 36" in the same plane as developed between sponson tips. The planing surface of the pad

must not vary more than 1/4 inch when measured across in the last 36 inches of the boat.

b. The outside sponsons may extend a maximum of 3" aft of center pod measured from the farthest aft portion of center pod, including protrusions, extensions and fins on outside sponson.

CLASSIC OUTBOARD RUNABOUT (COR-100) TECHNICAL RULES

ENGINES:

Inline 6 and OMC crossflow V-4 engines originally manufactured and made available to the general public with a displacement of 100 cu. in. or less. Engines built and manufactured strictly for racing shall be prohibited. The engines must be naturally aspirated and run on gasoline containing no oxygen-carrying additives introduced to the combustion chamber in any way. The maximum displacement for any engine shall be 105 cu. in. to provide for cylinder "clean-up". Unless specifically forbidden in the following rules, engines may be modified in any way. Strangler and T-2 type engines shall not be allowed in the COR-100 class.

MERCURY AND OMC MANUFACTURED POWERHEADS: (COR-100)

1. Engines must be of a standard production design. Special purpose engines shall not be permitted.
2. Ports may be modified, raised, or enlarged, but shall remain in their original positions. Ports may not be added to the cylinders.
3. Powerheads must exhaust no higher than the midsection.
4. The engine may have no more than 4 carburetor venturis (OMC) and 3 single venturi carburetors (Mercury).
5. All critical or performance-related parts/components (except pistons, rings, bearings, reeds, electronics, sealing components etc.) shall be made by the OEM. Parts may be exchanged with other model engines from the same manufacturer. No aftermarket parts or mixing of parts from other manufacturers shall be allowed.

MIDSECTIONS:

See rules governing midsections for COR-2.0s (same rules apply).

LOWER UNITS:

See rules governing lower units for COR-2.0 (same rules apply).

HULLS:

See rules governing COR-2.0 rules with the following exceptions:

1. V-Bottom and Flat-Bottom boats only. Mod V/P's shall be prohibited
2. Weight: Minimum of 1175 lbs. measured in the same manner as the COR 2.0s with the same rules regarding ballast etc.
3. Length: 15' 6", measured in the same manner as the COR 2.0s.

SPECIFIC RULES:

1. STARTS, DISQUALIFICATIONS, FLAG SIGNALS, COURSE AND RACE SAFETY

All COR classes shall be run together. The starts shall be staggered with the smaller boats starting first. On Beach and Clock starts, the handicap shall be 15 seconds per 5 miles of racing. This number is subject to adjustment at every race to ensure a fair finish. Beach starts shall also be staggered with the same. The "handicap adjustment" will be done by a vote of the members present at each event. The COR

-100s may also start at the same time as the COR – 2.0s but run fewer overall laps.

1. The course shall be laid out in reasonably protected waters and shall be no less than approximately one mile in length. When possible, all races of less than 50 miles shall use a clock start. In the absence of a clock, a pace boat or flags may be used to start the race. A modified Le Mans start may also be used but will generally be reserved for races of 50 miles (Enduro type) or more.

    a. In the event of a pace boat or flag start, a yellow flag will be displayed to bring the boats in an even starting position and "off plane" towards the start line. When the "starter" is satisfied that all boats are in position for a fair start, and within 500 feet or less of the starting line, the starter shall signal a fair start by dropping the yellow flag, waving the green flag and moving off the course without causing undue rough water. If the starter is not satisfied with the start, he shall continue to "fly" the yellow flag and do a slow 360 degree turn allowing all boats to queue up, then returning once again to the start line. If a competitor is judged to be the cause of a re-start at this point, he may be disqualified or required to run an extra lap.

    b. All starts will use a preparatory signal 3/5 minutes prior to the start of the race.

    c. There shall be no "milling" between the "barging" (500') buoy and the start lines with less than 1 minute prior to the start.

    d. A starter who is deemed to have "jumped the gun" shall be required to run an extra lap in a short race or in an Enduro race shall be "docked" one lap.

2. COURSE RULES AND FINISH (all COR classes)

a. The number of boats to run on a given course shall be decided by the referee.

b. When the winning boat crosses the finish line, all boats shall be allowed to finish the lap they are on in an Enduro race and shall have 15 minutes to finish in a short course race governed by laps and time.

c. Any boat breaking down on the course may accept a tow without penalty and may re-enter the race after repairs have been made. A boat may re-enter the race course at any time during the race and be scored accordingly except that he will not be scored for a lap completed under tow.

d. There shall be no limitations as to repairs; however, complete change of engine or boat after the race has officially started shall not be permitted. A specific boat may be repaired and returned to race after an inspection by a designated safety inspector.

e. A race of 100 miles or more shall require a minimum of one (1) out of the water pit stop of at least 10 minutes in duration. A race of 200 miles or greater shall require a minimum of two (2) out of the water pit stops of at least 10 minutes in duration. Required pit stops in a race of greater than 300 miles shall be at the discretion of the race committee.

f. Any boat overtaking another boat shall keep out of the way of the overtaken boat until an overlap exists. An overlap shall exist when any part of the overtaking boat is even with the cockpit of the overtaken boat. Once an overlap condition exists, both boats shall maintain their lanes and separation until the passing boat has established a 3-boat-length lead, after which either boat shall be allowed to change lanes.

3. STOPPING THE RACES-RESTARTS:

A. A race may be continued in the event of an accident as long as the race chairman receives an OK from the driver/s via appropriate hand signals and it is deemed safe to continue the race under yellow /green. If it becomes necessary to stop the race, the following rules shall apply:

1. When a red flag is displayed all boats shall come to a complete stop as soon as possible so as not to hinder a rescue operation and follow the flag signals of the officials.

B. Re-starts in a race started by clock, pace boat or flags; Boats shall be required to start in lanes with the inside lane going to the lead boat at the time of race stoppage. Lane 2 shall go to the boat in second at time of race stoppage and so forth until all boats have received a starting position. Re-starts of a race that began with a modified Le Mans start; Boats shall be lined up along the beach in order of their position at time of race stoppage with the lead boat receiving the most advantageous position and so forth until all boats have received a starting position.

C. The following rules apply to a boat or boats that cause a race stoppage.

1. They will receive an automatic 3-lap penalty and be required to re-start in the last position.

2. In the event of damage, the boats concerned must be safety inspected prior to continuing in competition.

RULE 6: SCORING AND REQUIREMENTS:

To score local points to be tabulated by COR chairman, only one boat must cross the start line to receive COR points. This boat shall receive 100 local points. If there is more than one boat starting, the winning boat shall receive as many points x 100 as the number of COR boats crossing the start line; i.e. if there are 5 boats competing: 1st place=500 points, 2nd place=400 points, 3rd place=300 points, 4th place=200 points and 5th (last place)=100 points. The boat is not required to finish in order to receive points. A boat that does not finish shall be awarded last place points. If two or more do not finish they each shall receive last place or 100 points each. The first place boat would still (in a case of 5 starters) receive 500 points and so on. These points shall be tabulated after each heat of racing including the final. The winner of the race shall be declared by the officials in the same manner that all APBA races are scored. Our point system is strictly a COR point system to be used for high points at the end of the year etc. Boats receiving points and wishing to have them tabulated with the COR class must call them in to the COR Chairman Rodney Zapf at 310-376-6392 or c) 310-488-3563 or rodneyzapf@gmail.com.